

## INFORMATION DISCLOSURE STATEMENT

Applicant : Steven F. Bolling et al.  
App. No. : 10/735,413  
Filed : December 12, 2003  
For : CANNULAE FOR SELECTIVELY  
ENHANCING BLOOD FLOW  
Examiner : Unknown  
Group Art Unit : 3763

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Enclosed is form PTO-1449 listing 186 references. Copies of disclosed U.S. patents and/or publications are not included pursuant to PTO waiver of the requirement under 37 C.F.R. § 1.98(a)(2)(i) for applications filed after June 30, 2003. Copies of other references, if listed, are enclosed.

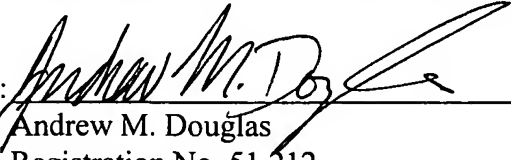
This Information Disclosure Statement is being filed before the receipt of a first Office Action on the merits, and presumably no fee is required in accordance with 37 C.F.R. § 1.97(b)(3). If a first Office Action on the merits was mailed before the mailing date of this Statement, the Commissioner is authorized to charge the fee set forth in 37 C.F.R. § 1.17(p) to Deposit Account No. 11-1410.

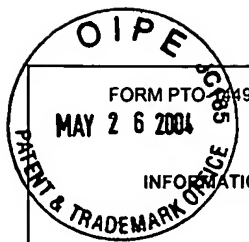
Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: May 24, 2004

By:

  
Andrew M. Douglas  
Registration No. 51,212  
Attorney of Record  
Customer No. 20,995  
(949) 760-0404



FORM PTO 589 MAY 26 2004 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)	ATTY. DOCKET NO. ORQIS.018A	APPLICATION NO. 10/735,413
	APPLICANTS Steven F. Bolling, M.D., et al.	
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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
	1.	2003/0144628	7/03/03	Sirimanne			
	2.	2003/0083617	5/01/03	St. Germain et al.			
	3.	2003/0069468	4/10/03	Bolling			
	4.	2002/0188167	12/12/02	Viole et al.			
	5.	2002/0188166	12/12/02	Viole et al.			
	6.	2002/0169413	11/14/02	Keren et al.			
	7.	2002/0111577	8/15/02	Sirimanne et al.			
	1	6,685,621	2/03/04	Bolling et al.			
	2	6,610,004	8/26/03	Viole et al.			
	3	6,592,567	7/15/03	Levin et al.			
	4	6,558,356	7/19/98	Barbut			
	5	6,488,662	12/03/02	Sirimanne			
	6	6,428,464	8/06/02	Bolling			
	7	6,390,969	5/21/02	Bolling et al.			
	8	6,387,037	5/14/02	Bolling et al.			
	9	6,299,575	10/09/01	Bolling			
	10	6,287,608	9/11/01	Levin et al.			
	11	6,245,045 B1	6/2001	Stratienko			
	12	6,228,052 B1	5/2001	Okada et al.			
	13	6,224,540	5/01/01	Lederman et al.			
	14	6,221,103	4/24/01	Melvin			
	15	6,200,260	3/13/01	Bolling			
	16	6,190,408	2/20/01	Melvin			
	17	6,183,411	2/06/01	Mortier et al.			
	18	6,135,981	10/24/00	Dyke			
	19	6,085,754	7/11/00	Alferness et al.			
	20	6,083,198	7/04/00	Afzal			

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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
	21	6,059,760	5/9/00	Sandmore et al.			
	22	5,964,694	10/12/99	Siess et al.			
	23	5,961,486	10/05/99	Twardowski et al.			
	24	5,947,953	9/7/99	Ash et al.			
	25	5,941,813	8/24/99	Sievers et al.			
	26	5,911,685	6/15/99	Siess et al.			
	27	5,868,703	2/09/99	Bertolero et al.			
	28	5,851,174	12/22/98	Jarvik et al.			
	29	5,824,070	10/20/98	Jarvik			
	30	5,807,311	9/15/98	Palestrant			
	31	5,795,326	8/18/98	Siman			
	32	5,785,686	7/1998	Runge Thomas M.			
	33	5,776,111	7/07/98	Tesio			
	34	5,749,855	5/12/98	Reitan			
	35	5,746,575	05/05/98	Westphal et al.			
	36	5,584,804	12/17/96	Klatz et al.			
	37	5,571,093	11/05/96	Cruz et al.			
	38	5,562,595	10/08/96	Neisz			
	39	5,556,390	9/17/96	Hicks			
	40	5,554,136	9/10/96	Luther			
	41	5,542,937	8/06/96	Chee et al.			
	42	5,536,250	7/16/96	Klein et al.			
	43	5,533,958	6/9/96	Wilk			
	44	5,522,800	6/04/96	Crocker			
	45	5,514,073	5/7/96	Miyata et al.			
	46	5,511,958	04/30/96	Chen et al.			
	47	5,505,710	4/1996	Dorsey, III			
	48	5,503,615	04/30/96	Goldstein			

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	49	5,486,159	1/23/96	Mahurkar			
	50	5,472,417	12/05/95	Martin et al.			
	51	5,453,087	9/24/85	Sommercorn et al.			
	52	5,453,076	09/26/95	Kiyota et al.			
	53	5,437,601	8/1/95	Runge			
	54	5,433,731	7/18/95	Hoegnelid et al.			
	55	5,429,584	07/04/95	Chiu			
	56	5,413,549	5/9/95	Leschinsky			
	57	5,403,291	4/04/95	Abrahamson			
	58	5,378,230	1/03/95	Mahurkar			
	59	5,376,113	12/27/97	Jansen et al.			
	60	5,374,239	12/20/94	Mischenko			
	61	5,352,180	10/04/94	Candelon et al.			
	62	5,346,458	09/13/94	Affeld			
	63	5,332,403	07/26/94	Kolff			
	64	5,318,518	6/07/94	Plechinger et al.			
	65	5,300,113	04/05/94	Arpesella et al.			
	66	5,290,227	3/1/94	Pasque			
	67	5,273,518	12/28/93	Lee et al.			
	68	5,267,940	12/07/93	Moulder			
	69	5,263,978	11/23/93	Kaufman et al.			
	70	5,211,659	5/18/93	Strimling et al.			
	71	5,176,619	1/05/93	Segalowitz			
	72	5,171,207	12/15/92	Whalen			
	73	5,169,379	12/08/92	Freed et al.			
	74	5,169,378	12/08/92	Figuera			
	75	5,147,388	9/15/92	Yamazaki			

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	76	5,147,281	9/15/92	Thornton et al.			
	77	5,133,744	7/28/92	Ramos Martinez			
	78	5,131,905	7/21/92	Grooters			
	79	5,129,878	7/14/92	Takano et al.			
	80	5,129,883	7/14/92	Black			
	81	5,116,564	5/26/92	Jansen et al.			
	82	5,098,370	3/24/92	Rahat et al.			
	83	5,092,844	3/03/92	Schwartz et al.			
	84	5,089,017	2/18/92	Young et al.			
	85	5,087,247	2/11/92	Horn et al.			
	86	5,069,662	12/03/91	Bodden			
	87	5,059,167	10/19/91	Lundquist et al.			
	88	5,020,516	6/04/91	Biondi et al.			
	89	4,995,857	2/26/91	Arnold			
	90	4,995,856	2/26/91	Heindl et al.			
	91	4,994,078	2/19/91	Jarvik			
	92	4,976,270	12/11/90	Parl et al.			
	93	4,968,293	11/06/90	Nelson			
	94	4,957,504	9/18/90	Chardack			
	95	4,944,745	7/31/90	Sogand et al.			
	96	4,927,407	5/22/90	Dorman			
	97	4,908,012	3/13/90	Moise et al.			
	98	4,906,229	3/06/90	Wampler			
	99	4,902,273	2/20/90	Choy et al.			
	100	4,902,272	2/20/90	Milder et al.			
	101	4,895,150	1/23/90	Isaacson et al.			
	102	4,883,462	11/28/89	Williamson et al.			

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	103	4,872,874	10/10/89	Taherin			
	104	4,861,330	8/29/89	Voss			
	105	4,838,889	6/13/89	Kolff			
	106	4,822,357	4/18/89	Forster et al.			
	107	4,771,765	9/20/88	Choy et al.			
	108	4,759,760	7/26/88	Snapp Jr.			
	109	4,756,302	7/12/88	Portner et al.			
	110	4,719,921	1/19/88	Chirife			
	111	4,697,574	10/6/87	Karcher et al.			
	112	4,692,141	9/08/87	Mahurkar			
	113	4,690,134	9/01/87	Snyders			
	114	4,688,998	8/25/87	Olsen et al.			
	115	4,685,446	8/11/87	Choy			
	116	4,666,443	5/19/87	Portner			
	117	4,625,712	12/02/86	Wampler			
	118	4,611,578	5/27/86	Helmes			
	119	4,573,997	3/04/86	Wisman et al.			
	120	4,569,332	2/11/86	Schiff et al.			
	121	4,552,522	11/12/85	Polaschegg et al.			
	122	4,546,759	10/15/85	Solar			
	123	4,540,402	9/10/85	Aigner			
	124	4,522,195	6/11/85	Schiff			
	125	4,459,977	7/17/84	Pizon et al.			
	126	4,457,673	7/03/84	Conley et al.			
	127	4,405,313	9/20/83	Sisley et al.			
	128	4,407,271	10/04/83	Schiff			
	129	4,384,829	5/24/83	Conely et al.			

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	130	4,302,854	12/01/81	Runge			
	131	4,240,409	12/23/80	Robinson et al.			
	132	4,167,046	9/11/79	Portner et al.			
	133	4,154,227	5/15/79	Krause et al.			
	134	4,143,616	3/13/79	Bible			
	135	4,135,496	1/23/79	Chazov et al.			
	136	4,080,958	3/19/78	Bregman et al.			
	137	4,077,394	3/07/78	McCurdy			
	138	4,051,840	10/4/77	Kantrowitz et al.			
	139	4,047,849	9/13/77	Clay			
	140	4,034,742	7/12/77	Thoma			
	141	4,004,299	1/25/77	Runge			
	142	3,964,479	6/22/76	Boag et al.			
	143	3,939,820	2/24/76	Grayzel			
	144	3,885,251	5/27/75	Pedrosa			
	145	3,835,864	9/17/79	Rasor et al.			
	146	3,692,018	9/19/72	Goetz et al.			
	147	3,592,184	7/13/71	Watkins et al.			
	148	3,017,885	1/19/62	Robicsek			
	149	2,935,068	5/30/60	Donaldson			
	150	2,876,769	3/10/59	Cordova			

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	151	2 174 151A ✓	1/10/85	UK				
	152	SU 1,303,165 A2 ✓	1/19/85	Russia				

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FOREIGN PATENT DOCUMENTS								
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	153	0,232,074	1/22/87	Europe				
	154	0 711 574 A1 /	5/15/96	EPO				
	155	0 533 432 A1 /	3/24/93	EPO				
	156	0 411 605 A1 /	1/08/90	EPO				
	157	0 405 749 A1 /	5/25/90	EPO				
	158	WO 94/05347 /	3/17/94	WO				
	159	WO 97/15228 /	5/01/97	WO				
	160	WO 98/14225 /	3/10/97	PCT				
	161	WO 99/19010 /	4/22/99	PCT				
	162	WO 99/42156	8/26/99	PCT				
	163	WO 99/59652	11/25/99	PCT				
	164	WO 00/61207	10/19/00	PCT				

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
	165	PCT International Search Report, App. Date: 6/18/03 PCT/US/03/04401 /
	166	JAMA, January 8, 1968. Vol. 203. No 2, Initial Clinical Experience with Intra-aortic Balloon Pumping in Cardiogenic Shock. PP 113-118
	167	Article: A Mechanical Auxiliar Ventricle. PP M340-344.
	168	Article: Effect of Stationary Guiding Vanes on Improvement of the Washout Behind the Rotor in Centrifugal Blood Pumps: PP M220-224
	169	Article: An Implantable Seal-less Centrifugal Pump: Comparison of Ultrasonic Transit Time and Ultrasonic Doppler Systems: PP 808-815
	170	Article: Valluvan Jeavanandam. MD. Et al. TCI Heartmate Left Ventricular Assist System: Results with Bridge to Transplant and Chronic Support: 5PP total
	171	Article: O.H. Frazier, MD. Long-Term Ventricular Support with the Heartmate in Patients Undergoing Bridge-to-Transplant Operation: 3PP total
	172	Article: Concepts in the Application of Pneumatic Ventricular Assist Devices for Ischemic Myocardial Injury. PP 162-168
	173	Article: Long-Term Left Ventricular Assist Device Use Before Transplantation: PP M530-M534
	174	Article: In Vitro Characterization of a Magnetically Suspended Continuous Flow Ventricular Assist Device: PP M359-M360
	175	Article: Estimation of Left Ventricular Function in Patients With a Left Ventricular Assist device: M544-551
	176	Article: Long Term Follow Up of Survivors of Postcardiotomy Circulatory Support. Ruzevich et al.; 4535, A.S.A.I.O. Transactions 34 (1988) April-June, No. 2, Hagerstown, MD, USA. PP 16-124

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	177	Article: Mechanical Cardiopulmonary Support During Arteriography and Surgical Correction of Coronary Insufficiency Producing Myocardial Infarction with Cardiogenic Shock; Carlson et al. Journal of the Association for the Advancement of Medical Instrumentation. Vol. 6, No. 3. May-June 1972; PP 244-248.
	178	Article: The Sternotomy Hemopump, A Second Generation Intraarterial Assist Device. PP M218-220, 223.
	179	Article: Transarterial Closed-Chest Left Ventricular (TaCLV) Bypass. PP 386-390.
	180	Article: First Clinical Application of transarterial Closed-Chest Left Ventricular (TaCLV) Bypass. PP 386-391.
	181	Article: Implantable Left Ventricular Assist Device. PP 1522-1533.
	182	Article: Effects of Partial and Complete Unloading of The Failing Left Ventricle by Transarterial Left Heart Bypass. PP 865-872.
	183	Article: Hydrodynamic Properties of a New Percutaneous Intra-aortic Axial Flow Pump. Reitan et al. ASAIO Journal 2000. pp. 323-328.
	184	Journal of the Association for the Advancement of Medical Instrumentation, Vol. 10, No. 5, Sept.-Oct 1976, p. 215; Medical Instrumentation Editorial
	185	Dormandy, Goetz, and Kripke; Surgery, Feb. 1969, Vol. 65, No. 2, pp. 311-320; Hemodynamics and coronary blood flow with counterpulsation
	186	The New England Journal of Medicine, Article: Treatment of Severe Fluid Overload by Ultrafiltration, Vol. 291, No. 15, Oct. 10, 1974, pp. 747-751

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